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XVII.—On certain Coleoptera from St. Helena. By T. VERNON WOLLASTON, M.A., F.L.S.

ANY material from so remote a spot as St. Helena, which is about 1200 miles from the nearest point of the African coast, must of necessity prove highly interesting,-more particularly to the geographical naturalist, for whom a more isolated field could scarcely perhaps be found. True it is that the island must have greatly deteriorated, in a scientific point of view, during the last 300 years, since but few traces of the forests now remain which are said to have clothed it at its discovery; nevertheless in the small parts which are still left untouched, and have escaped the ruthless hand of "civilization," some glimpses of its ancient glory may doubtless be discerned; and from the general character of these "fragmentary remains" we must needs build up our estimate, as correctly as we can, of the primeval forms with which this little oasis of the mid-Atlantic was originally stocked. In the present paper I do not intend to make any allusion to the stray insects which have been recorded, from time to time, by other naturalists from this distant rock, -most of which, like the Calosoma Helenæ (brought from thence by Mr. Darwin, and described by the Rev. F. W. Hope), are peculiar to it; but, having lately received from my friend Mr. Bewicke of Madeira a most important batch of 14 species, collected by himself (whilst touching there, en route from the Cape, on the 21st of July last), during two or three hours' research "amongst indigenous woods on the extreme summit* of the island," I propose merely to

^{*} By reference to an encyclopædia, it would appear that St. Helena rises abruptly from the Atlantic, and attains an elevation (at its highest point) of about 2700 feet above the sea.

give a critical enumeration of them, and so add a mite to our small, but growing, knowledge of that curious eccentricity which is so frequently conspicuous amongst remote insular forms.

On glancing over the following catalogue, it will be perceived that, of Mr. Bewicke's fourteen species, two belong to the Geodephaga, eight to the Rhynchophora, and one to the Lamellicornia, Phytophaga, Heteromera, and Pseudotrimera, respectively,-indicating a marvellous majority for the weevils, which, if we remove from the list the Pristonychus complanatus (which is clearly an introduced insect, and one which has established itself in almost all the Atlantic islands), will number nearly two-thirds of the entire lot ! And if we consider, further, that the six extra-Rhynchophorous forms belong to well-known genera (Calosoma, Pristonychus, Heteronychus, Longitarsus, Opatrum, and Cydonia), and that at least three of them are identical with widely-distributed species, whilst the eight Rhynchophora are all of them endemic both in species and genus-and not merely "endemic," but anomalous in structure in proportion to the remoteness of their habitat,-we shall scarcely fail to be struck by the conviction that the Curculionidæ will, in all probability, be found to play a most important part in the Coleopterous fauna of St. Helena. Indeed, in the remarks under Microxylobius, I have expressed my belief (from the mere diversity of configuration presented by the five exponents there described) that it is almost certain that the members of that abnormal little group are (in species) locally abundant, and that consequently many additional representatives may yet be looked for: and since the same might be urged, with no less force, for that extraordinary genus Notioxenus, there is every reason for suspecting that the Rhynchophora of this mountain-island are (in proportion to its size) both numerous and eccentric.

Fam. Carabidæ.

Genus Calosoma. Weber, Observat. Entom. 20 (1801).

1. Calosoma haligena, n. sp.

C. supra obscure æneum, subtus nigrum; capite irregulariter punctato; prothorace parvo, transverso, ad latera valde et subæqualiter rotundato (postice vix angustiore), angulis posticis retrorsum productis sed rotundatis, densissime ruguloso-punctato; elytris crenato-striatis, interstitiis æqualibus transversim imbricato-rugatis, punctis æneis in triplici serie impressis; antennis pedibusque nigro-piceis et (in fœmina saltem) brevibus; tibiis intermediis (saltem in sexu fœmineo) leviter incurvis.

Long. corp. lin. 11.

A single specimen (a female) of this fine Calosoma was taken by Mr. Bewicke at St. Helena. In its obscurely brassy and rugulose upper-surface it belongs to the same type as the African species C. Scnegalense and rugosum; nevertheless from the former of these it is abundantly distinct. With the latter, judging from the description, it is much more nearly allied; though I am informed by Mr. F. Smith, who has kindly compared it for me with examples in the British Museum, that it is not only more depressed and with the coppery punctures smaller, but that the prothorax is more deeply rugose in front and behind, and that the legs are slenderer and with the pile on the underside of the feet very much softer,-being, in fact, fine hairs, instead of stiff bristles. Apart from the characters, however, which separate it from the C. rugosum in particular, I may just add, that its very small and short prothorax (which is almost equally rounded before and behind, and has its posterior angles, although backwardly produced, very obtuse), in conjunction with its transversely-imbricated and equally-convex elytral interstices and its shortened limbs (at any rate in the female sex, of which I can alone speak), should be especially noticed.

Genus Pristonychus.

Dejean, Spec. des Col. iii. 43 (1828).

2. Pristonychus complanatus, Dej.

Pristonychus complanatus, Dej., Spec. des Col. iii. 58 (1828). — alatus, Woll., Ins. Mad. 27 (1854). — . . . , id., Cat. Mad. Col. 11 (1857).

Three specimens of this insect were taken by Mr. Bewicke at St. Helena; and I have seen another, from the same locality, in the collection of Mr. Fry. It is a species of Mediterranean latitudes, occurring in Portugal, Spain, the south of France, Italy, Sieily, Egypt, and the coast of Barbary; and one which also abounds in most of the Atlantic islands. It is said to be common throughout the Azorean archipelago; and I have myself captured it in Madeira and Porto Santo, as well as in Lanzarote, Teneriffe, and Palma (of the Canaries). It is recorded by Dejean as having been found even in Chili.

Fam. Oryclidæ.

Genus HETERONYCHUS.

(Dej.) Burm., Handb. der Entom. v. 90 (1847).

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3. Heteronychus arator, Fab.

Searabæus arator, Fab., Ent. Syst. i. 33 (1792). Geotrupes arator, id., Syst. Eleu. i. 21 (1801). Heteronychus arator, Burm., Handb. der Entom. v. 94.

A single specimen of this *Heteronychus*, taken by Mr. Bewicke at St. Helena, agrees precisely (so far as I can detect) with numerous examples of the same species which he captured at the Cape of Good Hope, from which locality it was originally described by Fabricius in 1792. It may possibly be identical with the *H. Sanctæ-Helenæ* of Hombron and Jacquinot, characterized in the Zoological portion of Dumont d'Urville's ' Voyage au Pole Sud sur les Corvettes l'Astrolabe et la Zélée' (p. 105. pl. 7. f. 6) : but if such should be the case, the latter cannot be more than a variety (if indeed that) of the South African *arator*; and I may add, that my friend Dr. Sehaum of Berlin, to whom I lately transmitted the St. Helena specimen for comparison, and who has paid great attention to this department of the Lamellicorns, at once identified it with the Fabrician species.

Fam. Curculionidæ.

Genus MICROXYLOBIUS.

Chevrolat, Trans. Ent. Soc. Lond. (1st series) i. 98 (1836).

Having given a full diagnosis of this eurious genus in my late enumeration of "the Atlantic Cossonides," published in the 'Transactions of the Entomological Society of London,' accompanied with lengthened observations on its structure and affinities, I will not repeat any of them in the present paper. The five exponents recorded below (and which were there characterized) appear to be congeneric with the minute Curculio, from St. Helena, described by M. Chevrolat under the title of Microxylobius Westwoodii; and, from the great diversity of their outward contour, it would seem far from improbable that many allied forms yet remain to be detected, and that, like the Caulotrupides in Madeira, they will be found to be an extensive insular assemblage. For all critical and diagnostie remarks I must refer to the above-mentioned memoir.

4. Microxylobius lacertosus, Woll.

Microxylobius lacertosus, Woll., Trans. Ent. Soc. Lond. (1861).

5. Microxylobius lucifugus, Woll.

Microxylobius lucifugus, Woll., Trans. Ent. Soc. Lond. (1861).

6. Microxylobius terebrans, Woll.

Microxylobius terebrans, Woll., Trans. Ent. Soc. Lond. (1861).

7. Microxylobius Chevrolatii, Woll.

Microxylobius Chevrolatii, Woll., Trans. Ent. Soc. Lond. (1861).

8. Microxylobius conicollis, Woll.

Microxylobius conicollis, Woll., Trans. Ent. Soc. Lond. (1861).

Genus Nesiotes, nov. gen. (Pl. XIV. fig. 3.)

Corpus fere ut in Microxylobio, sed dense squamosum, ovatum, genus Acalles (Cryptorhynchidum) omnino simulans, supra et infra grosse alutaceum (nec aliter sculpturatum), rostro apiceque ipso abdominis inferiore solis lævioribus et punctatis; rostro longiore graciliore, necuon ad basin (mox ante oculos) subito transversim constricto, quasi (prima facie) ibidem articulato; scrobe infra oculos desinente, et cæt. ut in genere præcedenti, sed elytris in medio prothorace multo latioribus. Antennæ ut in Microxylobio; sed scapo paulo longiore et ad apicem magis elavato; funiculo 5-articulato, art. 1mo secundo distincte latiore, 2do tertio multo (et etiam primo paulo) longiore. Pedes ut in genere præcedenti, sed dense squamosi, antici ad basin vix distantiores; femoribus muticis, paulo magis elavatis, et unco tibiali acutiore, magis incurvo.

A νησιώτης insulæ incola.

The remarkable little insect for which I have been compelled to erect the present genus has, at first sight, so much the appearance of a small Acalles, that (before critically overhauling it) I had placed it aside as a member of that group. On closer examination, however, its funiculus is composed of only five joints (instead of seven), whilst there is no trace of a pectoral groove for the reception of its rostrum. It is consequently excluded from the whole subfamily Cryptorhynchides by the latter circumstance alone; whilst from the Cossonides, with some of the genera of which it would agree as regards the former, it is altogether remote. Its affinities are indeed extremely doubtful; but, upon the whole, I should have been inclined to suspect that the Cholides would perhaps have received it more readily than any other of Schönherr's subfamilies, had not Prof. Lacordaire assured me that in his opinion it could not properly be associated with the exponents of that department. Nevertheless I may add that M. Jekel concurred with me in regarding the Cholides as its most probable location,-adding that, when thus situated, it would find a "somewhat allied neighbour, in general outline and many analogous characters, in the genus Pylarus, from the Cape of Good Hope." Nevertheless it must be admitted that its real position, in a natural classification, is very questionable.

9. Nesiotes squamosus, n. sp. (Pl. XIV. fig. 3.)

N. ovatus, fusco-piceus, opacus et squamis fusco-brunneis crassis plus minus obsitus; prothorace convexo, mox ante medium rotundatoampliato, postice angustiore subrecto; elytris convexis, ovatis antice truncatis et postice leviter acuminatis (i. e. mox intra apicem leviter constrictis); antennis (præsertim ad basin) tarsisque calvis rufescentibus.

Long. corp. lin. $1\frac{1}{2}$.

Two specimens only of this curious little weevil were amongst Mr. Bewicke's captures at St. Helena.

Fam. Anthribidæ.

Genus Notioxenus, nov. gen. (Pl. XIV. figs. 1, 2.)

Corpus sat parvum, oblongo-ovatum, vel pubescenti-variegatum vel subglabrum et pictum, quasi vere Curculionideum : rostro brevi, triangulari, apice rotundato-truncato; oculis lateralibus, rotundatis, demissis : prothorace subovato postice truncato, ante basin vel linea impressa vel striga elevata (plus minus arcuatis) transversim instructo: scutello minutissimo (ægre observando) : elytris ovalibus basi truncatis, postice paulo abbreviatis (pygidium vix tegentibus), necnon ad apicem ipsum singulatim paulo rotundatis. Antennæ graciles, rectæ, in pagina superiore rostri (mox intra oculos in fovea) insertæ; articulis 1mo et 2do longiusculis (illo paulo robustiore curvato), 3^{tio} ad 8^{vum} longitudine subæqualibus, latitudine leviter crescentibus, reliquis clavam elongatam laxam 3-articulatam sat abruptam pilosam efficientibus (9nº et 10mº intus obsolete productis, ultimo subgloboso). Pedes breviusculi, subgraciles; tibiis rectis, ad apicem muticis; tarsis pseudotetrameris, art. 1mo longiusculo, 2do paulo breviore latiore, ad apicem leviter emarginato, 3tium latiorem bilobum recipiente.

A vórios austrinus, et Éévos hospes.

Regarding the affinities of this singular genus there cannot be much question,-its straightened antennæ, which are implanted on the upper surface of the rostrum, immediately within the eyes, in conjunction with their lax triarticulate club, its sub-basal prothoracic line, slightly abbreviated clytra, and the construction of its second and third tarsal joints at once assigning it to that small section of the Anthribidæ of which, I believe, the only recorded genera are Caranistes (from Madagascar), the partially saltatorial Arccocerus (from Java, India, &c.), and the saltatorial Choragus and Xenorchestes (from Europe and Madeira respectively). Nevertheless in

212

external contour it must be admitted that it is most anomalous, presenting such an exact resemblance to the ordinary *Curculionidæ* (as, for instance, some of the Atlantie *Cyclomides*, such as *Atlantis* and *Laparocerus*), that it is scarcely possible at first sight to help associating it with the members of that family. It is on this very account, however, peculiarly interesting; for, if there had been any doubt as to the real affinity of the Orthocerous and Gonatocerous divisions of the *Rhynchophora*, assuredly such a genus as *Notioxenus*, which combines the structural features of the former with the almost precise outward likeness of the latter, would have gone far to dispel it.

10. Notioxenus Bewickii, n. sp. (Pl. XIV. fig. 1.)

N. fusco-niger, subopacus, impunctatus, squamulis fuscis dense tectus et cinereis parce pictus; prothorace linea sub-basali impressa curvata notato et plagis tribus longitudinalibus cinereo-squamosis obscure picto; elytris impunctato-striatis, maculis minutis plurimis cinereo-squamosis irroratis; antennis fuscis, basi rufo-testaceis; pedibus fusco-piceis, genibus rufescentioribus, tarsis picescenti-testaceis.

Long. corp. lin. $2\frac{3}{4}$.

A single specimen of this extraordinary insect was taken by Mr. Bewicke; and I have much pleasure in dedicating it to its captor, to whose researches we are indebted for the several novelties described in the present paper. At first sight it has much the outline and colouring of a Madeiran or Canarian *Atlantis*,—its dark-brown, densely-clothed surface, relieved only by small and indistinct patches of dull einereous scales, somewhat calling to mind certain members of that group. Not to mention many other characters, its almost impunctate, though rather alutaceous and subopake surface (which, however, can only be perceived when the pubescence is removed), in conjunction with its unpunctured clytral striæ, and its deeplyimpressed and curved sub-basal prothoracic line, deserve to be especially noticed.

11. Notioxenus rufopictus, n. sp. (Pl. XIV. fig. 2.)

N. piceo-ater, nitidus, subglaber; prothorace striga sub-basali elevata minus curvata notato, profunde et dense punctato; elytris profunde crenato-striatis, interstitiis convexis, parce, minutissime et irregulariter punctulatis, maculis parvis plurimis (præsertim ad basin et versus latera) rufis vel rufo-testaceis (plus minus confluentibus) ornatis; antennis fuscis, basi rufo-testaceis ; pedibus nigro-piceis, femoribus versus apicem genibusque rufescentioribus, tarsis picescenti-testaceis. Long, corp. lin. vix $1\frac{2}{3}$.

The black, shining, and less pubescent surface of this beautiful

little *Notioxenus*, its strongly and closely punctured prothorax (the sub-basal line of which is *raised*, instead of impressed, and not much eurved), added to the convex interstices, deeply-crenate striæ, and the numerous small and bright rufo-testaceous patches of its elytra, will at once abundantly distinguish it. Like the last species, a single specimen only was captured by Mr. Bewicke.

Fam. Halticidæ.

Genus Longitarsus.

Latreille, Fam. Nat. des Ins. 405 (1825).

12. Longitarsus Helenæ, n. sp.

L. oblongo-ovatus, subnitidus, obscure viridescenti-æneus, alutaceus; prothorace parce et leviter punctato, ante medium latiusculo, postice paulo angustiore, angulis posticis obtusis; elytris sat profunde punctatis; antennis pedibusque longissimis, rufo-testaceis, illis versus apicem femoribusque posticis paulo obscurioribus.

Mas, tarsis anterioribus articulo basilari valde elongato dilatato [secundo latiore].

Long. corp. lin. vix 1.

The greenish-brassy alutaceous surface and pale elongate limbs of this little *Longitarsus*, in conjunction with the broad, largelydeveloped basal joint of its four anterior male feet, will sufficiently characterize it. A single specimen only was taken by Mr. Bewicke. It is quite distinct from any species with which I am acquainted; and Mr. Waterhouse, who has been working lately at the *Halticida*, assures me that he knows nothing at all like it.

Fam. Coccinellidæ.

Genus Cydonia.

Mulsant, Spec. des Col. Trim. Sécurip. 430 (1851).

13. Cydonia lunata, Fab.

Coccinella lunata, Fab., Syst. Ent. 86 (1775).

____, id., Syst. Eleu. i. 384 (1801).

Cydonia lunata, Muls., Col. Trim. Sécurip. 431 (1851).

An insect of a very wide geographical range,—being recorded from Senegal, the Cape of Good Hope, Caffraria, Madagascar, the islands of Bourbon and Mauritius, the East Indies, and Java. It is a most variable species; and whatever doubt may be entertained as to the claim for separation of some of the extreme states which have been ascribed to it, there can at least be no question about the St. Helena

214

form, which must be regarded as the typical one,—the specimens described originally by Fabricius (in 1775). in the Banksian collection, being from St. Helena. It is probably the common *Coccinella* of the island. Four examples were taken by Mr. Bewicke (who likewise captured it at the Cape of Good Hope); and I have seen others in the possession of Mr. Fry.

Fam. Opatridæ.

Genus Opatrum.

Fabrieius, Syst. Ent. 76 (1775).

14. Opatrum Hadroides, n. sp.

O. latiusculum, nigrum, breviter fulvescenti-pubescens; capite lato, ad latera ante oculos rotundato-ampliato (nec angulato); prothorace brevi, ad latera vix rotundato, apice haud profunde emarginato, angulis anticis subrotundatis (nec longe porrectis acutis), angulis posticis acutis (sed haud longe retrorsum productis); elytris parallelis, punctato-striatis, ad humeros rectangulis.

Long. corp. lin. $4\frac{1}{2}$.

Although unwilling to erect a new species in such an extensive and obscure genus as Opatrum, yet, after a careful comparison of the present insect with a long series of Atlantic forms (from Madeira, the Canaries, the Cape de Verdes, and the Cape of Good Hope,-two from each), I am induced to do so in this instance, since the remoteness of its island-habitat renders it à priori probable that it will be found to be peculiar to St. Helena. The whole of the winged Opatra (i. e. the Gonocephala of Solier) are moulded so nearly on the same type, that small differences which might be disregarded in many groups become important with them; and, after a close examination, I am convinced that there are no characters so much to be depended upon as the exact form of the dilated sides of the head (immediately in front of the eyes), and the relative depth of the emargination (accompanied with the greater or less prominence and acuteness of the anterior angles) of the prothorax. The O. Hadroides is very nearly akin to a species which was taken by Mr. Bewicke at the Cape of Good Hope; but is altogether rather larger, broader, and more parallel, its head is a little wider, with the lateral expansion, in front of the eyes, more rounded (or less angular at the extreme point of projection), its prothorax is less deeply scooped-out in front, with the anterior angles (consequently) less porrected and more obtuse; the hinder angles also are somewhat less produced, and its shoulders are more rectangular. Although narrower and on a smaller scale, it has a slight *primd facie* resemblance, in general contour, to the more parallel-sided *Hadri* (such as the *H. alpinus* and *Paivæ*),—a circumstance which has suggested its trivial name.

XVIII.—Description and Figures of a new Genus and Species of Gallerucidæ. By J. O. WESTWOOD, Esq.

Genus Chalenus.

Corpus oblongo-ovale, subconvexum, læve, nitidum; eapite brevi, lato, supra transverso; facie verticali, magna; prothorace transverso, capite hand majore; elytris subovalibus. Cuput transversum, breve, supra parum convexum; oculis rotundatis, angulos anticos laterales occupantibus, vertice in medio in tuberculum rotundatum (in cujus parte antica insident antennæ basi approximatæ) paullo elevatum. Facies magna, quadrata, verticalis, infra truncata; clypeo parvo, distincto, antice angustato; labro parvo, antice rotundato, margine setoso. Mandibulæ latæ, breves, extus rotundatæ, antice convexæ; maxillæ parvæ, lobo apicali tenui curvato, apice acuto; palpi maxillares parvi, tenues, articulo 1mo brevissimo, 2do et 3tio longioribus ad apicem sensim incrassatis, 4to minuto acuminato. Mentum parvum, breviter subcordatum, lateribus rotundatis. Labium ejusdem formæ et paullo majus. Palpi labiales parvi, articulo basali minuto, 2do majore sensim incrassato, 3tio parvo acuminato. Antennæ fere corporis longitudine, in medio paullo crassiores, apicem versus attenuatæ, articulo 1mo capite longiore, tenui, apice clavato, 2do minuto, 3tio longitudine dimidium articuli 1mi excedente, reliquis setosis et sensim longitudine decrescentibus, intermediis crassioribus, apicalibus attenuatis, ultimo appendicula minuta conica terminato. Prothorax brevis, transversus, capite paullo angustior, lateribus et margine postico margine tenui elevato instructis. Scutellum triangulare. Elytra ovata, convexa, lævia, tenue marginata. Prosternum simplex. Pedes mediocres, femoribus satis robustis; tibiis paullo incurvis; tarsis dilatatis, subtetrameris; unguibus basi appendiculatis.

Obs. The description and drawing of the parts of the mouth are not so complete as I could have wished, not having considered myself at liberty to dissect the specimens lent to me by the authorities of the Leyden Museum.

Chalaenus latifrons. (Pl. XII. fig. 1.)

C. luteus; antennis in medio, facie, mandibulis, tibiis tarsisque piceis; elytris læte purpureis; corpore supra lævi; elytrorum lateribus serie marginali punctorum impressis.

Long. corp. lin. 31/2.

Hab. Batang Singalang. In Mus. Lugdunensi.

Facies in medio parum concava, utrinque lineis duabus impressis

216